

SEQUENCE LISTING

<110> Bramley, John A.
Plaut, Karen I.
Kerr, David

<120> TREATMENT OF STAPHYLOCOCCUS INFECTIONS

<130> Mastitis

<140> 00/000,000

<141> 2002-02-28

<160> 10

<170> PatentIn Ver. 2.1

<210> 1

<211> 1486

<212> DNA

<213> Staphylococcus simulans

<400> 1

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<211> 388

<212> PRT

<213> Staphylococcus simulans

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Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val
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Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser
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Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys Ala Pro
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Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn
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Thr Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu
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Val Glu Thr Ser Lys Ala Leu Val Gln Asn Arg Thr Ala Leu Arg Ala
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Ala Thr His Glu His Ser Gln Trp Leu Asn Asn Tyr Lys Lys Gly Tyr
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Gly Tyr Gly Pro Tyr Pro Leu Gly Ile Asn Gly Gly Met His Tyr Gly
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Val Asp Glu Phe Met Asn Ile Gly Thr Pro Val Lys Ala Ile Ser Ser
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Ile Gly Leu Ile Glu Asn Asp Gly Val His Arg Gln Glu Tyr Met His

210	215	220
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Pro Met Pro Phe Leu Lys Ala Ser Gly Tyr Gly Lys Ala Gly Gly Thr		
	275	280 285
Val Thr Pro Thr Pro Asn Thr Gly Trp Lys Thr Asn Lys Tyr Gly Thr		
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Leu Tyr Lys Ser Glu Ser Ala Ser Phe Thr Pro Asn Thr Asp Ile Ile		
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Thr Arg Thr Thr Gly Pro Phe Arg Ser Met Pro Gln Ser Gly Val Leu		
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Lys Ala Gly Gln Thr Ile His Tyr Asp Glu Val Met Lys Gln Asp Gly		
	340	345 350
His Val Trp Val Gly Tyr Thr Gly Asn Ser Gly Gln Arg Ile Tyr Leu		
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<211> 741

<212> DNA

<213> Staphylococcus simulans

<400> 3

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<212> DNA

<213> Staphylococcus simulans

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<211> 480

<212> PRT

<213> Staphylococcus simulans

<400> 5

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Ala Glu Val Glu Thr Ser Lys Pro Pro Val Glu Asn Thr Ala Glu Val
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Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser
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Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys Ala Pro
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Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn
100 105 110

Thr Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu
115 120 125

Val Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr
130 135 140

Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys Ala
145 150 155 160

Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu
165 170 175

Asn Thr Ala Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala
180 185 190

Glu Val Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu
195 200 205

Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser Lys
210 215 220

Ala Leu Val Gln Asn Arg Thr Ala Leu Arg Ala Ala Thr His Glu His
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<211> 492
 <212> PRT
 <213> Achromobacter lyticus

<400> 6

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Lys	Ala	Pro	Val	Glu	Asn	Thr	Ala	Glu	Val	Glu	Thr	Ser	Lys	Ala	Pro
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Thr	Ala	Glu	Val	Glu	Thr	Ser	Lys	Ala	Pro	Val	Glu	Asn	Thr	Ala	Glu
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145				150					155					160	
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	210					215				220					
Ala	Pro	Val	Glu	Asn	Thr	Ala	Glu	Val	Glu	Thr	Ser	Lys	Ala	Leu	Val

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Leu Asn Asn Tyr Lys Lys Gly Tyr Gly Tyr Gly Pro Tyr Pro Leu Gly						
	260		265		270	
Ile Asn Gly Gly Met His Tyr Gly Val Asp Phe Phe Met Asn Ile Gly						
	275		280		285	
Thr Pro Val Lys Ala Ile Ser Ser Gly Lys Ile Val Glu Ala Gly Trp						
	290		295		300	
Ser Asn Tyr Gly Gly Gly Asn Gln Ile Gly Leu Ile Glu Asn Asp Gly						
305		310		315		320
Val His Arg Gln Trp Tyr Met His Leu Ser Lys Tyr Asn Val Lys Val						
	325		330		335	
Gly Asp Tyr Val Lys Ala Gly Gln Ile Ile Gly Trp Ser Gly Ser Thr						
	340		345		350	
Gly Tyr Ser Thr Ala Pro His Leu His Phe Gln Arg Met Val Asn Ser						
	355		360		365	
Phe Ser Asn Ser Thr Ala Gln Asp Pro Met Pro Phe Leu Lys Ser Ala						
	370		375		380	
Gly Tyr Gly Lys Ala Gly Gly Thr Val Thr Pro Thr Pro Asn Thr Gly						
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Trp Lys Thr Asn Lys Tyr Gly Thr Leu Tyr Lys Ser Glu Ser Ala Ser						
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Phe Thr Pro Asn Thr Asp Ile Ile Thr Arg Thr Thr Gly Pro Phe Arg						
	420		425		430	
Ser Met Pro Gln Ser Gly Val Leu Lys Ala Gly Gln Thr Ile His Tyr						
	435		440		445	
Asp Glu Val Met Lys Gln Asp Gly His Val Trp Val Gly Tyr Thr Gly						
	450		455		460	
Asn Ser Gly Gln Arg Ile Tyr Leu Pro Val Arg Thr Trp Asn Lys Ser						
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Thr Asn Thr Leu Gly Val Leu Trp Gly Thr Ile Lys						

<210> 7

<211> 741

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: altered S.
simulans lysostaphin gene

<400> 7

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<210> 8

<211> 480

<212> PRT

<213> Staphylococcus simulans

<400> 8

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      20                   25                   30

Glu Thr His Ala Ser Glu Lys Ser Asn Met Asp Val Ser Lys Lys Val
      35                   40                   45

Ala Glu Val Glu Thr Ser Lys Pro Pro Val Glu Asn Thr Ala Glu Val
      50                   55                   60

Glu Thr Ser Lys Ala Pro Val Glu Asn Thr Ala Glu Val Glu Thr Ser
      65                   70                   75                   80

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Ser Gly Ser Thr Gly Tyr Ser Thr Ala Pro His Leu His Phe Gln Arg
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Met Val Asn Ser Phe Ser Asn Ser Thr Ala Gln Asp Pro Met Pro Phe
 355 360 365

Leu Lys Ser Ala Gly Tyr Gly Lys Ala Gly Gly Thr Val Thr Pro Thr
 370 375 380

Pro Asn Thr Gly Trp Lys Thr Asn Lys Tyr Gly Thr Leu Tyr Lys Ser
 385 390 395 400

Glu Ser Ala Ser Phe Thr Pro Asn Thr Asp Ile Ile Thr Arg Thr Thr
 405 410 415

Gly Pro Phe Arg Ser Met Pro Gln Ser Gly Val Leu Lys Ala Gly Gln
 420 425 430

Thr Ile His Tyr Asp Glu Val Met Lys Gln Asp Gly His Val Trp Val
 435 440 445

Gly Tyr Thr Gly Asn Ser Gly Gln Arg Ile Tyr Leu Pro Val Arg Thr
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<210> 9

<211> 1825

<212> DNA

<213> Staphylococcus simulans

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<210> 10

<211> 6457

<212> DNA

<213> *Achromobacter lyticus*

<400> 10

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